Purch 500 C Moui Ph 65	nasing astro ntain 0-903	g Divi St/PC View -6324	NTAIN VIEW sion D Box 7540 CA 94039-7540 Fax 650-968-5472		Page 1 of 25 Date: 5/20/2016 Time: 3:00 PM
Vendor Name Vendor Address					
Item	Qty	Unit	Description		Ext Price
0001	1	LOT	PLAN DRAWING GIS BASEMAP UPDATE SERVICES, as per attached specifications and plan drawings.		\$
			A mandatory pre-bid telephone conference call is schedular for Monday, May 9, 2016, 2016 10:00AM (PT). Please call 650-903-6684 and enter CODE 1234567.	led	
Disco	unt P	ayme	Net 30 or better nt Terms: % days. GRAND very of business days ARO	TOTAL	\$

CITY OF MOUNTAIN VIEW

REQUEST FOR BIDS NO. R17

SECTION I: INSTRUCTIONS FOR SUBMITTING BIDS

1.	<u>T</u>	V 1	pe	of	Re	ply	7 R	eq	uestec	<u>1</u> :

Request for Bid, Informal (fax bids are acceptable)
Request for Bid, Formal, Public Opening (no faxes)

2. **Bids Due:** 3:00 PM, Friday, May 20, 2016

3. **Reply To:** City of Mountain View

Attention: Chris Hartje, Supervising Buyer
500 Castro Street
Mountain View, CA 94041

or

P.O. Box 7540 Mountain View, CA 94039-7540

Phone: (650) 903-6324 Fax: (650) 968-5472

Questions: Call the person named above for questions regarding this bidding process.

- 4. Reply Format: The entire bid form, including all attachments, must be returned by the bid due date to the above address. The envelope returning the bid shall have the bid number and the due date. By signing our bid form, you are agreeing to the City's Terms and Conditions. (Please note insurance requirements on Pages 6 and 7.) Once notified of bid award, the Vendor has five days to send the correct certificate of insurance. Lack of a timely response is grounds for rejection of the Vendor's bid.
- 5. **Prebid Conference:** The prebid conference is mandatory (if required and noted on the bid form) and is for the City's protection, to ensure that vendors know the work required. The Purchasing Agent may waive this requirement if the Vendor is familiar with the work requirements and asks the City for permission to miss the prebid conference.
- 6. <u>Deviations from Bid Specifications</u>: If there are any deviations from the brands and/or specifications, the Vendor MUST note such differences, brand names, model numbers and attach brochures and a complete description of the goods or services bid. The burden of showing the equivalency is on the Vendor.

7. **<u>Bid Award</u>**: The City reserves the right to reject any and all bids, or to waive any errors, discrepancies or irregularities. The bid will be awarded at the discretion of the City Manager (formal bids) or Purchasing Agent (all other bids) on an item-by-item basis, or in any fashion that best meets the needs of the City. All blanks for unit prices must be completed.

SECTION II: TERMS AND CONDITIONS

- 1. Payment Terms: The City's payment terms are, at a minimum, net thirty (30) days after acceptance of service or delivery of goods. The Vendor's invoice must easily match the unit prices listed in this bid and must include the Vendor's Social Security number or Federal Tax I.D. number. Vendors may offer discounted payment terms and those should be listed on the Vendor's response.
- 2. <u>Time of Delivery/Completion</u>: Time is of the essence on this purchase order. The Vendor shall deliver all of the goods or complete all of the services called for under this proposal within the number of working/calendar days or by the date specified for completion in this proposal, unless the delays are caused by the City or by acts of God. Failure to deliver on time shall be grounds for termination of this Agreement or invoke "Liquidated Damages" if required below.
- 3. <u>Freight Charges:</u> All prices bid shall include all freight costs and ownership transfers to the City at the City's location and are F.O.B. destination to the designated locations. Freight, if quoted separately, shall be prepaid and added to the invoice with ownership transferring to the City when delivery is completed to the City's location.

	_	
Required	\boxtimes	Not Required

Liquidated Damages:

4.

If required, it is agreed by the Vendor that if the goods or services are not delivered complete, as called for in this proposal, damages will be sustained by the City, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the City will sustain in the event of and by reason of such delay; and it is, therefore, agreed that the Vendor will pay to the City the sum of Three Hundred Fifty Dollars (\$350) per day for each and every calendar day's delay in finishing the work in excess of the number of working or calendar days prescribed or in excess of the date specified for completion or delivery of the goods or services, whichever is applicable in this Proposal; and the Vendor agrees to pay said liquidated damages as herein provided; and in case the same are not paid, agrees that the City may deduct the amount thereof from any moneys due or that may become due the Vendor under this proposal.

Partial payments paid to the Vendor after the scheduled completion dates shall not be constituted as a waiver of the City's right to assess liquidated damages.

- 5. Firm Prices: All quotes will be held firm for a minimum of thirty (30) days after the bid due date listed above to allow adequate time for the City to consider each bid and make an award. All blanks for unit price and total price shall be completed. Any discrepancy between the unit price and the extended or total price shall be determined by taking the lower price. Upon receipt of this bid by the City, the Vendor shall be presumed to be thoroughly familiar with all the aspects of this proposal, including installation sites and all specifications and requirements of this proposal. The failure or omission to examine any location, equipment, form, instrument or document shall in no way relieve Vendor from any obligation in respect to this bid.
- 6. Warranty: The delivered or installed goods, equipment or services shall be warranted to be free from defects in material and workmanship. The warranty period shall begin upon acceptance by the City. As a minimum, all goods, equipment and services shall be warranted to operate satisfactorily in accordance with the requirements of these specifications, representations of the Vendor and the published specifications of the manufacturer(s) for a period of at least one (1) year. Any defective goods, equipment or services shall be replaced or repaired quickly at the City's location during the warranty period at no expense to the City. If repairs cannot be made at the City's location, the Vendor shall transport/ship the equipment to a repair facility. All repairs must be completed and the equipment returned to the City within seventy-two (72) hours of a call for service. If the Vendor fails to have the equipment repaired within seventy-two (72) hours, the Vendor shall provide an equal "loaner" piece of equipment until the City's equipment is returned in operating condition.

Prevailing Wages:

7.

☐ Required ☐ Not Required

If required, notice is hereby given that the latest general prevailing rate of per diem wages, as determined by the Director or the Department of Industrial Relations, State of California, is to be paid to the various craftsmen and laborers employed in the construction of this project and is made a part of the specifications and contract for this project.

Reference is hereby made to copies of the general rate of per diem wages as determined by the Director of the Department of Industrial Relations on file in the Department of Public Works, City of Mountain View, which are available to any interested party.

For failure to pay the prevailing wages, the contractor shall forfeit, as a penalty, to the City, Fifty Dollars (\$50) for each workman for each calendar day or portion thereof who is paid less than the stipulated prevailing wage for work done under this contract, in

violation of the provisions of the Labor Code, Sections 1770 to 1780, inclusive. In addition to said penalty, the contractor, or subcontractor, shall pay to each worker the difference between the prevailing wage and the amount paid to said worker for each calendar day for which said worker was paid less than the prevailing wage.

- 8. <u>MSDS</u>: General Industrial Safety Order 5195 requires Material Safety Data Sheets (MSDS) be supplied, for all applicable items, with the initial delivery.
- 9. <u>Licensed Contractor</u>: All contractors bidding on work requiring a State of California Contractor's License must state under penalty of perjury that they are a licensed contractor by listing their license number, date of expiration, type of license and description of that type of license.

Contractor's License No.: _	
Date of Expiration:	
Type of License:	
Description of License:	

- 10. Ownership and Collusion Financial Interest by City Employees: The Vendor certifies, by signing this bid, that he/she has not, directly or indirectly, been collusive with any other vendor or anyone else interested in this bid. Additionally, the Vendor stipulates that no City officer or employee shall be financially interested, either directly or indirectly, in any contract, sale, purchase or lease to which the City is a party, and the Vendor stipulates that no City officer or employee has greater than five percent (5%) ownership in this company, as per Section 706 of the City of Mountain View Charter.
- 11. <u>Assignment</u>: This Agreement, nor any part of this Agreement, may be assigned without the written consent of the other party.
- 12. <u>Termination</u>: Any purchase order issued as a result of this bid may be terminated by the City at any time with ten (10) days' written notice. The City will only pay for any goods or services ordered and accepted by the City. Any payments made in advance will be returned to the City on a prorated basis with the City only paying for those goods or services actually provided.
- 13. **Funding Out Clause:** Any purchase order issued as a result of this bid may be terminated every June 30 based upon the City Council not funding the purchase of goods or services to be provided in this bid after each July 1.
- 14. <u>Nondiscrimination</u>: The Vendor shall afford equal employment opportunities for all persons without discrimination because of race, color, religion, sex, sexual orientation, political affiliation, national origin, ancestry, age, marital status or physical or mental disability.

- 15. Applicable Laws and Attorneys' Fees: This Agreement shall be construed and enforced pursuant to the laws of the State of California. Should any legal action be brought by a party for breach of this Agreement or to enforce any provision herein, the prevailing party of such action shall be entitled to reasonable attorneys' fees, court costs and such other costs as may be fixed by the court. Reasonable attorneys' fees of the City Attorney's Office, if private counsel is not used, shall be based on comparable fees of private attorneys practicing in Santa Clara County.
- 16. <u>Subcontractors</u>: The City prefers a proposal with a single or primary vendor. If you propose a multi-vendor or subcontracted approach, clearly identify the responsibilities of each party and the assurances of performance you offer. The Vendor is the prime contractor and is solely responsible for all of the Vendor's subcontractors.

17. Insurance:

INSURANCE COVERAGE REQUIREMENTS

COVERAGE TYPE	REQUIREMENT	MINIMUM LIMITS EACH OCCURRENCE AGGREGATE	
COMMERCIAL GENERAL LIABILITY: Occurrence-Based Coverage Personal Injury Broad Form Property Damage Blanket Contractual	Bodily Injury and Property Damage Bodily Injury and Property Damage Combined	\$2,000,000 \$2,000,000	\$4,000,000 \$4,000,000
COMPREHENSIVE AUTOMOBILE LIABILITY:* • Any Auto • Owned • Hired • Non-Owned	Bodily Injury (Each Person) Bodily Injury (Each Occurrence) Property Damage Bodily Injury and Property Damage Combined	\$1,000,000 \$1,000,000 \$1,000,000 \$1,000,000	No Annual Aggregate
WORKERS' COMPENSATION EMPLOYER'S LIABILITY	California Mandated	Statutory Lir \$1,000,000	mits
PROFESSIONAL LIABILITY** (Errors and Omissions)	If Applicable to Contractor's Profession and Scope of Services (Claims Made Form)	\$1,000,000	\$2,000,000

^{*} If Contractor has no Owned Autos; Hired and Non-Owned Auto liability coverage is required.

<u>Other Insurance Provisions</u>. The insurance policies are to contain, or be endorsed to contain, the following provisions:

a. <u>Additional Insured Status</u>. The City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the Commercial General Liability policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor, including materials, parts, or equipment furnished in connection with such work or operations. An endorsement at least as broad as ISO Form CG 20 10 11 85 or if not available, through the addition of **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 if a later revision is used.

The City, its officers, officials, employees, and volunteers are to be covered as additional insureds on the Automobile Liability policy.

^{**} Contractor to provide proof of coverage for up to three (3) years after the completion of a project.

- b. <u>Primary Coverage</u>. For any claims related to a contract, the Contractor's insurance coverage shall be primary coverage at least as broad as ISO CG 20 01 04 13 with respect to the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute to it.
- c. <u>Transfer of Rights of Recovery/Waiver of Subrogation</u>. Contractor grants the City a waiver of any rights to subrogation which any insurer of Contractor may acquire against the City by virtue of the payment of any loss under such insurance. ISO CG 24 04 for CGL and an endorsement to the Workers' Compensation policy. This provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.
- d. <u>Notice of Cancellation</u>. Contractor shall provide 30-day notification to the City of any change of coverage or cancellation of insurance.
- e. <u>Insurer's Acceptability</u>. Insurance is to be placed with insurers with a current *A.M. Best's Rating* of A:VII or higher and admitted to do business in the State of California, or with insurers who are *A.M. Best* rated and on the California Department of Insurance approved List of Approved Surplus Line Insurers (LASLI).
- f. <u>Waiver or Modification of the Insurance Requirements</u>. Any waiver or modification of the insurance requirements can only be made by the City's Risk Manager or designee at the City's discretion.
- 18. <u>Hold Harmless</u>: Vendor shall defend, indemnify and hold City, its officers, employees and agents harmless from any liability for damage or claims of same, including but not limited to personal injury, property damage and death, which may arise from Vendor or Vendor's contractors, subcontractors, agents or employees' operations under this Agreement. City shall cooperate reasonably in the defense of any action, and Vendor shall employ competent counsel, reasonably acceptable to the City Attorney.
- 19. Reliance Upon Professional Skill: It is mutually agreed by the parties that the City is relying upon the professional skill of the Vendor, and the Vendor represents to the City that its work shall conform to generally recognized professional standards in the industry. Acceptance of the Vendor's work by the City does not operate as a release of the Vendor's said representation.

20.	20. Extending Contract Pricing: The successful Vendor will extend bid pricing as quoted herein to other political subdivisions (i.e., cities, counties, school districts, etc.).						
	Yes	☐ No					
		er political subdivisions, additional delivery tween the political subdivision and the Vendor.					
21.	Entire Agreement: This Agreement contains the entire understanding between the parties with respect to the subject matter herein. There are no representations, agreements or understandings (whether oral or written) between or among the parties relating to the subject matter of this Agreement which are not fully expressed herein. the attachments or exhibits to this Agreement, if any, are inconsistent with this Agreement, this Agreement shall control.						
22.	the instructions to vendors, the terms a	ands and agrees that the conditions set forth in and conditions and the specifications, together submitted in response to the foregoing, shall he purchase order/contract.					
VE	NDOR:						
Co	ompany Name	Street Address of Company					
Sig	gnature of Officer	City, State, Zip					
Pri	inted Name of Officer	Telephone No./Fax No.					
Tit	ele of Officer	Federal I.D. Tax Number					
	9^ (QS Long) v. 7/12/05						

If

SECTION III: BIDDER'S REFERENCES AND SUBCONTRACTORS

A. REFERENCES

The Bidder is **required** to provide a minimum of 4 references where work of a similar size and nature was performed within the 5 years. This will enable the City of Mountain View to judge the responsibility, experience, skill, and business standing of the Bidder.

Client Name:	Contact Name:		
Address:	Phone Number:		
	Fax Number:		
Date of Project (when was work performed)	Email address:		
Describe what product or service was provided:			
Client Name:	Contact Name:		
Address:	Phone Number:		
	Fax Number:		
Date of Project (when was work performed)	Email address:		
Describe what product or service was provided:			
Client Name:	Contact Name:		
Address:	Phone Number:		
Audicos.	Fax Number:		
Date of Project (when was work performed)	Email address:		
Describe what product or service was provided:	Eman address.		
Client Name:	Contact Name		
Client Name:	Contact Name:		
Address:	Phone Number:		
Date of Project (when was work performed)	Fax Number:		
Date of Project (when was work performed) Describe what product or service was provided:	Eman address:		
Describe what product or service was provided:			
			

B. LIST OF SUBCONTRACTORS (Section 4104 of the Public Contract Code)

The following information is furnished relative to each subcontractor who will perform work or labor or render services to the undersigned in and about the construction of the project in an amount in excess of one-half (1/2) of one percent (1%) of the total amount of this bid, or in the case of bids for the construction of streets or highways, including bridges, in excess of one-half (1/2) of one percent (1%) of the undersigned's total bid or Ten Thousand Dollars (\$10,000), whichever is greater. The undersigned agrees that any portions of the work in excess of one-half (1/2) of one percent (1%) of the total amount of this bid; or Ten Thousand Dollars (\$10,000), if applicable; and for which no subcontractor is designated herein, will be performed by the undersigned.

	Work to be Performed		Subcontractor's Name and Address	<u>License No.</u>
1.				
2.				
3.				
4.				
5.				
6.				
		-		

SECTION IV: SPECIFICATIONS

A. PURPOSE

The City of Mountain View has adopted Geographic Information Systems (GIS) technologies to store, manage and maintain points, lines, and annotation line work in a GIS database as map layers. The GIS feature database of point, line, and polygon layers depict the City's road curbs, sidewalks, storm, sewer, water manholes and pipe systems, trees, signs, building footprints, landscape irrigation, etc, and feature attributes such as pipe diameter, material, vegetation botanical name, etc.

B. BACKGROUND

The GIS Basemap is maintained using "change control" documents that consist of City Engineering infrastructure plan drawings, private development plan drawings, and internal work order documents that showing new or changed conditions in the field that need replicating in the GIS database and Basemap.

C. GENERAL REQUIREMENTS

The City is seeking a qualified vendor to perform CAD-GIS data entry work involving City provided civil engineering project plan sheets.

Data entry will consist of specifically identified plan sheet infrastructure features (e.g., sewer main lines, manholes, trees, etc.), reproducing by digitizing the plan sheet feature line work (e.g., linear sewer main lines, sewer manhole center points, etc.), and data entry of specific feature attributes and plan sheet information (e.g. sewer main pipe size, pipe material, vegetation botanical name, plan sheet number, etc).

Generally, data entry will encompass the "Proposed" plan sheet line work listed in the plan sheet legend and line work symbolized, classified as New, Abandon, Demolish, and Move infrastructure work, and identified in the City's Specifications.

D. PRE-QUALIFICATIONS OF BIDDER

Bidder will be expected to demonstrate the following qualifications.

- 1. Bidders must have been in business of providing Plan Drawing update services for a minimum of 5 years.
- 2. Reading and understanding "as-build" or "final" engineering plan drawing sheets, plan view layouts, profile view layouts, superelevation view layouts, sheet notes, legends, symbols, acronyms, abbreviations, stationing, match lines, schedule tables, etc.

- 3. CAD-GIS digitizing and data entry training and experience skills needed to reproduce line work as depicted on a project plan sheet and displayed as background images in the City provided a "map projection" plan sheet orientation.
- 4. Ability to identify and classify infrastructure features and associated attribute information on plan drawing sheets, and digitize and data enter that information into CAD-GIS layer files, per City specifications.

E. EXAMINATION OF PLANS AND SPECIFICATIONS

The City shall provide example project sheet sets, specifications, data entry examples, and bid documents will be available electronically from the City's Purchasing Department to interest bidders that provide a delivery email and contact information.

By submitting a Bid, the Bidder has certified that he/she has carefully examine the City provided documents and specifications, and the Bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of the Work to be performed and materials to be furnished, and as to the requirements of project, scope of work to be performed, qualification requirements, technical specification, and deliverables.

F. <u>SPECIFICATIONS</u>

- 1. Data entry shall conform to the project plan sheet background image map projection. NAD 1983 2011 StatePlane California III FIPS 0403 Ft_US
- 2. City shall provide geo-referenced project sheet(s) and Contractor shall digitize line work and collect data entry features and attributes conforming to the geo-referenced project sheet(s).
- 3. GIS point and line Data Entry files shall consist of the following fields. Project template files will be provided by the City.
 - SHAPE* | PIN | STATUS | ABBRV | DESCRIPTION | EQUATION | EQUATION2 | DESCRIPTION | LAYER | DIAMETER | UNITS | MATERIAL | BOTANICAL | COMMON | MANUFACTURER | MODEL
- Status Code Table The following status codes shall be used in data entry file STATUS field each line work feature. Use only these codes and DO NOT leave blank.

Status Code	Description
A	Abandoned
D	Existing to Demolish
Е	Existing to Remain
M	Item to be Moved, Relocated
N	New Work or Repair, Replace, Adjust, etc.

Field	Description	Example	Example
Shape*	GIS-CAD Point or Line Geometry	PIN_8100_Point	☐ PIN_8110_Line —
PIN	Project ID Number and Sheet Number	8110-03	
STATUS	Status Code	N	
ABBRV	Line abbreviation on plan drawing symbol, leader, plan legend, or common industry standard.	SSMAIN (sanitary sewer main)	WSL (water service line) FHSL (fire hydrant service line)
DESCRIPTION	Legend or Abbreviation Description	Fire Hydrant	FDC - FIRE DEPT. CONNECTION FH = FIRE HYDRANT G = GAS GI - GRATE INLET GV - GATE VALVE
EQUATION	Plan drawing feature text, station, etc, as listed (ignore station number and reference).	8" HDPE SS 1" W	-SS 8" HDPE SS SS-
EQUATION2	If listed, Secondary text for additional EQUATION text	REPLACE (E) 8" VCP SS W/8" HDPE SS (PIPE BURST)	SS (E) 8 VCF 8" HDPE S 8" PVC W ABANDON (E) 8" CIP W REPLACE (E) 8" VCP SS W/ 8" HDPE SS (PIPE BURST)
LAYER	CAD-GIS Digital Mapping Specification Layer Primary or Secondary layer name	FIRE-HYDT	(See CAD-GIS Digital Mapping Layer Specifications)

DIAMETER	Diameter or size of	12	
	pipe, tree, etc.		
UNITS	Units of measure of	INCH, FOOT	BOX
	pipe, tree box, etc.		
MATERIAL	Material of pipe,	VCP	ROCK COBBLES
	surface, etc.		
BOTANICAL	Botanical name of tree,	ACER	
	shrub, turf, etc.	PALMATUM	
COMMON	Common name of tree,	JAPANESE	
	shrub, turf, etc.	MAPLE	
MANUFACTURER	Equipment	MUELLER	
	manufacturer or		
	company.		
MODEL	Equipment model.	SUPER	
		CENTURION	
		200 Style 190	

- 5. Line work shall conform to topology standards and directionality. Lines snapped to points, lines snapped to lines, no line dangles or overshoots, closed polylines, lines logically broken at valves, manholes, lines contiguous across sheets (e.g. water main) and conforming at "MATCH LINE SHEET" junctions, main line flow direction based on the plan sheet "PROFILE", closed polylines (polygons) have contiguous (snapped) beginning and ending point, etc.
- 6. Line work for points and lines shall be digitized as follows:

Item	Rule	Example
Map Scale	Data entry digitizing shall be collected at a map scale no greater than 1/3 (33%) of the published plan sheet map scale. Example: Published map scale is 1"=20' (1:240 RF). Digitize at 1"=6.66' (1:80 RF) map scale.	SEE SHEET 10 PLAN SCALE: 1"=20"
Point	Points shall be placed at the center and/end background image point of a feature.	

Line	Lines shall be place in the center and length of the background image line features	
Junctions	Example	
PIN Sheet Priority	Features with PIN sheet numbers that cross onto different sheets, use the sheet number that contains the majority of the feature.	TO CONSTRUCTION. TO CONSTRUCT

(Version 03-08-2016)

	A	В	С	D	Е
1	LAYER DESCRIPTION	PRIMARY LAYER	SECONDARY LAYER L	LINETYP	E GIS LAYER
2	Bridge deck	BRDG-DECK	SITE-BRDG-DECK	Line	Bridge
3	Buildings and primary structures	BLDG		Polygon	BuildingFootprint
4	Cable television	COMM-CATV		Line	
5	Road curb, gutter	ROAD-CURB	SITE-CURB	Line	StreetCurbType
6	Data/LAN	COMM-DATA		Line	
7	Driveway (uncurbed, unpaved, other)	DRIV-EDGE		Line	StreetCurbType
8	Driveway (curbed)	DRIV-CURB		Line	StreetCurbType
9	Edge of traveled way	ROAD-TRVL		Line	TraveledWay
10	Electrical power overhead wire	ROAD-POWR-OVHD	SITE-POWR-OVHD	Line	PriOHElectricLineSegment
11	Electrical power pole	ROAD-POWR-POLE	SITE-POWR-POLE	Point	Pole
12	Electrical power underground wire	ROAD-POWR-UGND	SITE-POWR-UGND	Line	PriUHElectricLineSegment
13	Fence, steel, chain link, wood	ROAD-FENC	SITE-FENC	Line	SiteAmenityLine
14	Fiber optic	COMM-FIBR		Line	FiberCable
15	Fire department connection (FDC)	WATR-FDC		Point	PreIncidentPlanPoint
16	Fire hydrant	FIRE-HYDT		Point	wHydrant
17	Fire hydrant lateral line	FIRE-HYDT-LATL		Line	wLateralLine
18	Guard rail	ROAD-FENC-GRAL		Line	Guardrail
19	Irrigation equipment, pumps, valves, controllers	IRRG-EQPM		Point	
20	Irrigation lateral pipe	IRRG-LTRL		Line	
21	Irrigation main, pipe	IRRG-MAIN		Line	
22	Irrigation sprinklers, rotors, heads	IRRG-SPLK		Point	
23	Irrigation valve	IRRG-VALV		Point	
24	Joint trench	COMM-JT		Line	
25	Landscape lawn area	ROAD-PLNT-TURF	SITE-PLNT-TURF	Polygon	LandscapeArea
26	Landscape planting bed edger	ROAD-PLNT-EDGR	SITE-PLNT-EDGR	Polygon	LandscapeArea
	Light hand hole, cabinents, etc.	ROAD-LITE-EQPM	SITE-LITE-EQPM	Point	SupportStructure
28	Light manhole, pullbox	ROAD-POWR-MHOL	SITE-POWR-MHOL	Point	ServicePoint
29	Light pole, luminar	ROAD-LITE	SITE-LITE	Point	Streetlight

	A	В С	D	Е
30	Road medians, islands	ROAD-ISLD	Line	LandscapeArea
31	Natural gas pipe	NGAS-PIPE	Line	
32	Parking lot curb	PRKG-CURB	Line	StreetCurbType
33	Parking lot pavement or parking edge	PRKG-EDGE	Line	StreetCurbType
34	Pavement lane markings (yellow/white strips)	ROAD-MRKG	Line	PavementMarkingLine
35	Pavement legends, symbols	ROAD-MRKG-LEGN	Point	PavementMarkingPoint
36	Project sheet callouts, labels, comments, notes	ANNO-LABL	Anno	
37	Project boundary	PROJ-BNDY	Polygor	PlanDrawing
38	Reclaimed irrigation equipment, pumps, valves, controller	IRRG-NPW-EQPM	Point	
39	Reclaimed irrigation lateral pipe	IRRG-NPW-LTRL	Line	
40	Reclaimed irrigation mainline	IRRG-NPW-MAIN	Line	
41	Reclaimed irrigation sprinklers, rotors, heads	IRRG-NPW_SPLK	Point	
42	Reclaimed Irrigation valve	IRRG-NPW-VALV	Point	
43	Reclaimed water cathodic protection test station	WATR-NPW-CATH-TEST	Point	rwFitting
44	Reclaimed water fire department connection (FDC)	WATR-NPW-FDC	Point	PreIncidentPlanPoint
45	Reclaimed water fire hydrant	FIRE-NPW-HYDT	Point	rwHydrant
46	Reclaimed water fire hydrant lateral line	FIRE-NPW-HYDT-LATR	Line	rwLateralLine
47	Reclaimed water lateral line	WATR-NPW-LATL	Line	rwLateralLine
48	Reclaimed water main	WATR-NPW-MAIN	Line	rwMain
49	Reclaimed water meter	WATR-NPW-METR	Point	rwServiceConntection
50	Reclaimed water pipe caps	WATR-NPW-PCAP	Point	rwFitting
51	Reclaimed water pipe joints	WATR-NPW-JNTS	Point	rwFitting
52	Reclaimed water post indicator valve (PIV)	WATR-NPW-PIV	Point	rwControlValve
53	Reclaimed water structures, backflow preventer, pump	WATR-NPW-STRC	Line	rwFitting
54	Reclaimed water valve	WATR-NPW-VALV	Point	rwControlValve
55	Reclaimed water well	WATR-NPW-WELL	Point	rwStructure
56	Road centerline	ROAD-CNTR	Line	RoadCenterline
57	Road culverts	ROAD-PIPE	Line	swCulvert
58	Road edge, curbed	ROAD-CURB	Line	StreetCurbType

	A	В	С	D	Е
59	Road edge, uncurbed or unpaved	ROAD-EDGE	SITE-ROAD-EDGE	Line	StreetCurbType
60	Road furniture (speed humps, bus stops, kiosks)	ROAD-FURN		Line	StreetFurniture
61	Sewer cleanout	SSWR-CO		Point	ssCleanout
62	Sewer force main	SSWR-FORC		Line	ssPressurizedMain
63	Sewer lateral line	SSWR-LATL		Line	ssLateralLine
64	Sewer main	SSWR-MAIN		Line	ssGravityMain
65	Sewer manhole	SSWR-MHOL		Point	ssManhole
66	Sewer structures	SSWR-STRC		Line	ssFitting
67	Sidewalk curb ramp	SWLK-RAMP	SITE-SWLK-RAMP	Line	Sidewalk
68	Sidewalk curb ramp center	SWLK-RAMP-CNTR	SITE-SWLK-RAMP-CNTR	Point	CurbRamp
69	Sidewalk edge	SWLK-EDGE	SITE-SWLK-EDGE	Line	Sidewalk
70	Sidewalk handicap ramps center (ADA design)	SWLK-RAMP-ACCS		Point	CurbRamp
71	Sign	ROAD-SIGN	SITE-SIGN	Point	Sign
72	Storm area drains	STRM-AREA-DI		Point	swInlet
73	Storm bio-retention area drains	STRM-AREA-BRDI		Point	swDetention
74	Storm bio-retention drain area	STRM-DRAN-BRAR		Polygon	swDetention
75	Storm catch basin or retention pond	STRM-POND		Line	swDetention
76	Storm channel, culvert	STRM-CHAN		Line	swOpenDrain
77	Storm curb inlet	STRM-CURB-DI		Point	swInlet
78	Storm ditches, washes	STRM-DTCH		Line	swOpenDrain
79	Storm force main	STRM-FORC		Line	swPressurePipe
80	Storm headwall, weir	STRM-HWAL		Line	swWeirStructure
81	Storm main	STRM-MAIN		Line	swGravityMain
82	Storm manhole	STRM-MHOL		Point	swManhole
83	Storm outfall pipe	STRM-PIPE		Line	ssDischargePoint
84	Storm pipe caps	STRM-PCAP		Point	swFitting
85	Storm pipe caps	SSWR-PCAP		Point	ssFitting
86	Storm pipe joints	STRM-JNTS		Point	swFitting
87	Storm pipe joints	SSWR-JNTS		Point	ssBend

	A	В	С	D	E
88	Storm riprap	STRM-RRAP		Line	swWeirStructure
89	Storm structures, backflow, cleanout	STRM-STRC		Line	swFitting
90	Telephone	COMM-PHON		Line	
91	Traffic signal	ROAD-SIGL		Point	Signal
92	Traffic signal hand holes, cabinents, other	ROAD-SIGL-EQPM		Point	SignalCabinet
93	Trail or Path	TRAL-EDGE		Line	Trail
94	Trail or Path centerline	TRAL-CNTR		Line	Trail
95	Trail sign	TRAL-SIGN		Point	Sign
96	Tree	ROAD-TREE	SITE-TREE	Point	Tree
97	Wall, median, sound	ROAD-WALL	SITE-WALL	Line	SiteAmenityLine
98	Water cathodic protection test station	WATR-CATH-TEST		Point	wTestStation
99	Water lateral line	WATR-LATL		Line	wLateralLine
100	Water main	WATR-MAIN		Line	wMain
101	Water meter	WATR-METR		Point	wServiceConnection
102	Water pipe caps	WATR-PCAP		Point	wFitting
103	Water pipe fasteners	WATR-FSTN		Point	wFitting
104	Water pipe joints	WATR-JNTS		Point	wFitting
105	Water post indicator valve (PIV)	WATR-PIV		Point	wControlValve
106	Water structures, backflow preventer, pump	WATR-STRC		Line	wFitting
107	Water valve	WATR-VALV		Point	wControlValve
108	Well	WATR-WELL		Point	wStructure

G. Pilot Material Deliverable

The Bidder shall demonstrate their qualifications by performing a Pilot deliverable of data entry line work digitizing and feature attribute collection to the City provided specifications.

The City shall specify One (1) sample plan sheet from the "Bid Inspection Materials" and provide the data entry template files for the Pilot deliverable. The Bidder is expected to return the Pilot deliverable per the City's "Technical Specifications" section.

H. Off-Shore Sourcing:

The contracted services being performed by the awarded Contractor may not be performed at any location outside the United States. If during the term of the contract, the Contractor or subcontractor proceeds to shift work outside of the United States, the Contractor shall be deemed in breach of contract.

I. Bid Inspection Materials

The City is expecting the Contractor to Bid on a City Services Agreement based on the following:

- 1. Estimated 15 (no guarantee) annual planned City Projects.
- 2. Complete set of project plan sheets (pdf format) for five (5) sample projects.
- 3. Complete set of 55 plan sheets (tif format), identified from the five (5) sample projects, required for data entry.
- 4. Sample Project "8100 FY2011-12 Sewer & Water", totaling twelve (12) plan sheets, and approximately 920 data entry features.
- 5. City data entry template files (shp format).
- 6. City Plan Drawing GIS Basemap Specifications documents.

J. <u>DELIVERABLES</u>

Contractor shall return the project sheet line work and collected feature attributes, as the final delivery, in the City provided ArcGIS point and line project template file format. The City's current City ArcGIS version is 10.3x, however, the City can work with the Contractor if other ArcGIS compatible file formats or version are the required.

K. QUALITY REVIEW

The Contractor is encouraged to discuss any project line work clarifications before submitting final delivery

The Contractor shall perform final checks to insure the complete line work collection, conforming line work to background image, feature attribute collection, specification requirements, etc.

From the date of the final delivery, the City shall have 30-calendar days to inspect and review the work. Within the 30-day City inspection, if line work or features attributes data corrections are identified, the City shall provide "red line" markups and the Contractor shall complete the corrections within 14-calendar days, and starting a new e final delivery date and 30-calendar review period.

SECTION V: BID SCHEDULE

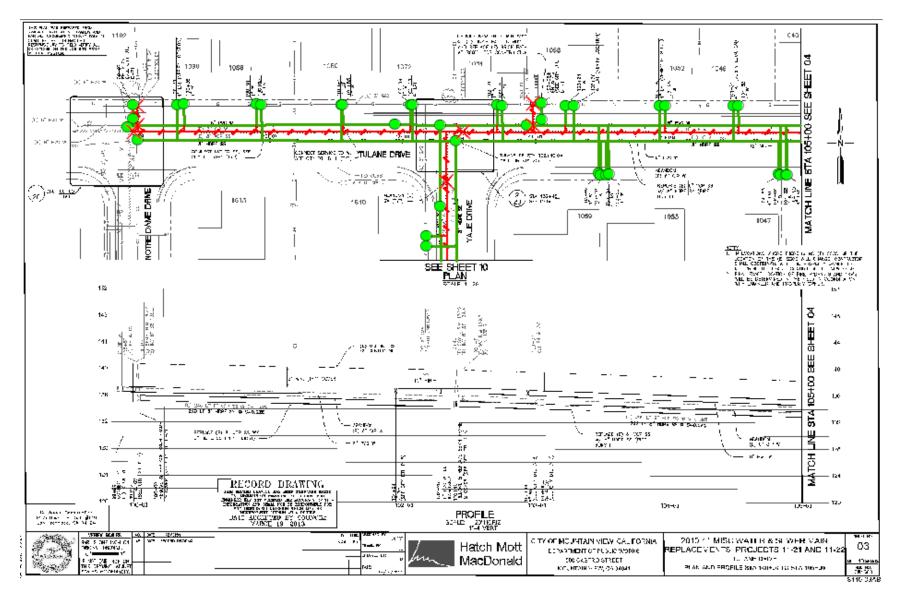
These quantities are listed for information purposes only and shall not be deemed to either guarantee a minimum amount or restrict the maximum amount to be delivered throughout the contract period. Nor shall any variations from the estimated quantities, regardless of extent, entitle the bidder to an adjustment in the unit price or to any other compensation.

ITEM DESCRIPTION	QTY*	<u>UNITS</u>	UNIT PRICE	<u>EXTENSION</u>
Project plan sheet	55	PER SHEET	\$	\$

^{* 55} sheets from 5 sample projects (provided)

THIS PAGE MUST BE RETURNED WITH BID SUBMITTAL

VI: (A) Example Plan Sheet background image with GIS data entry file point and line file overlay.



VI: (B) Example data entry point feature attribute file.

OBJECTID *	Shape *	PIN	STATUS	ABBRV	DESCRIPTION	EQUATION	EQUATION2	LAYER	DIAMETER	UNITS	MATERIAL	BOTANICAL	соммон	MANUFACTURER	MODE
		8110-03AB		FHWV	FIRE HYDRANT	<null></null>	<null></null>	FIRE-HYDT	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Null>
		8110-03AB		FH	FIRE HYDRANT	(E) FH & GV	<null></null>	FIRE-HYDT	<null></null>						
		8110-03AB		VVM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<nul></nul>
		8110-03AB		WV	WATER MAIN VALVE	<null></null>	<null></null>	WATR-VALV	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Null
		8110-03AB		FHWV	FIRE HYDRANT WATER VALVE	<null></null>	<null></null>	WATR-VALV	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Null
		8110-03AB		FH	FIRE HYDRANT	<null></null>	<null></null>	FIRE-HYDT	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Null
		8110-03AB			WATER MAIN JUNCTION	<null></null>	<null></null>	WATR-JNTS	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Null
		8110-03AB		SSMH	SEWER MANHOLE	REMOVE & REPLACE SSMH FRAME& COVER	<null></null>	SSWR-MHOL	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Null
		8110-03AB		FHWV	FIRE HYDRANT WATER VALVE	<null></null>	<null></null>	WATR-VALV	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
		8110-03AB			WATER MAIN CAP	<null></null>	<null></null>	WATR-PCAP	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<nul< td=""></nul<>
		8110-03AB		FH CAP		FH & GV	<null></null>						<null></null>	<null></null>	
					FIRE HYDRANT		<null></null>	FIRE-HYDT	<null></null>	<null></null>	<null></null>	<null></null>			<nul< td=""></nul<>
		8110-03AB		SSCO	SEWER CLEANOUT	<null></null>		SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	
		8110-03AB		VVM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
		8110-03AB		VVM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
	8 Point	8110-03AB		ssco	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
		8110-03AB		SSCO	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
		8110-03AB		VVM	VVATER METER	<null></null>	<null></null>	VVATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nui
		8110-03AB		VVM	VVATER METER	<null></null>	<null></null>	VVATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
		8110-03AB		V/M	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
		8110-03AB		ssco	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
		8110-03AB		SSMH	SEWER MANHOLE	REMOVE & REPLACE SSMH FRAME& COVER	<null></null>	SSWR-MHOL	<null></null>	<null></null>	<null></null>	<null></null>	∢Null>	<null></null>	≺Nul
145	5 Point	8110-03AB	N	WMAIN T	WATER METER T JUNCTION	<null></null>	<null></null>	WATR-JNTS	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
		8110-03AB		WV	WATER MAIN VALVE	<null></null>	<null></null>	WATR-VALV	<null></null>	≺Null>	≺Null>	<null></null>	<null></null>	<null></null>	≺Nul
		8110-03AB	N	WM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
149	9 Point	8110-03AB	N	SSCO	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
151	Point	8110-03AB	N	WV	WATER MAIN VALVE	<null></null>	<null></null>	WATR-VALV	<null></null>	≺Null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
153	Point	8110-03AB	N	FHWV	FIRE HYDRANT WATER VALVE	<null></null>	<null></null>	WATR-VALV	<null></null>	≺Null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
154	Point	8110-03AB	N	FH	FIRE HYDRANT	<null></null>	<null></null>	FIRE-HYDT	<null></null>	≺Null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
156	6 Point	8110-03AB	N	WM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	≺Null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
157	Point	8110-03AB	N	SSCO	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	≺Null>	≺Null>	≺Null>	∢Null>	<null></null>	≺Nul
158	9 Point	8110-03AB	N	VVM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	≺Null>	<null></null>	≺Nul
159	9 Point	8110-03AB	N	SSCO	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	≺Null>	≺Null>	≺Null>	∢Null>	<null></null>	≺Nul
160	Point	8110-03AB	N	SSCO	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	≺Null>	<null></null>	≺Nul
161	Point	8110-03AB	N	WM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
162	2 Point	8110-03AB	N	ssco	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
163	B Point	8110-03AB	N	WM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	≺Null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
164	1 Point	8110-03AB	N	SSCO	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
165	5 Point	8110-03AB	N	V/M	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	≺Null>	<null></null>	≺Nu
166		8110-03AB		ssco	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
		8110-03AB		V/M	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	≺Null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
		8110-03AB		V/M	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
		8110-03AB		ssco	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nu
		8110-03AB		WM	WATER METER	<null></null>	<null></null>	WATR-METR	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
	l Point	8110-03AB		ssco	SEWER CLEANOUT	<null></null>	<null></null>	SSWR-CO	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	≺Nul
17.1	OII IL	5.10-03AD	.,	5500	OLT TEX OLLANOOT	- STANIE	-14000-	COVALCOO	ATNORF	-i valie	-14GII/-	-140m-	-i sone	714400	

VI: (C) Example data entry line feature attribute file.

OBJ		110_Line														
	JECTID * Shape *	PIN	STATUS	ABBRV	DESCRIPTION	EQUATION	EQUATION2	LAYER	DIAMETER	UNITS	MATERIAL	BOTANICAL	COMMON	MANUFACTURER	MODEL	Shape_Length
	153 Polyline	8110-03AB	A	VMAIN	WATER MAIN	(E) 6" CIP W	<null></null>	WATR-MAIN	<null></null>		<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	247.298212
	155 Polyline	8110-03AB	A	VMAIN	WATER MAIN	(E) 8" CIP W	ABANDON (E) 8" CIP W	WATR-MAIN	<null></null>		<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	254.792797
	156 Polyline	8110-03AB	A	VMAIN	WATER MAIN	(E) 6" CIP W	<null></null>	WATR-MAIN	<null></null>		<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	37.345379
	157 Polyline	8110-03AB	Α	VMAIN	WATER MAIN	(E) 6" CIP W	<null></null>	WATR-MAIN	<null></null>		<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	59.373171
	165 Polyline	8110-03AB	Α	FHSL	FIRE HYDRANT SERVICE LINE	<null></null>	<null></null>	FIRE-HYDT-LATL	<null></null>	19.523537						
	166 Polyline	8110-03AB	Α	VMAIN	WATER MAIN	(E) 6" PVC W	<null></null>	WATR-MAIN	<null></null>		<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	6.554983
	169 Polyline	8110-03AB	Α	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	4.62497
	171 Polyline	8110-03AB	A	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	4.931699
	175 Polyline	8110-03AB	A	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	5.106003
	177 Polyline	8110-03AB	A	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	5.307557
	182 Polyline	8110-03AB	A	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	5.04414
	186 Polyline	8110-03AB	Α	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	5.32158
	188 Polyline	8110-03AB	Α	FHSL	FIRE HYDRANT SERVICE LINE	(E) FH & GV	<null></null>	FIRE-HYDT-LATL	<null></null>	21.69077						
	191 Polyline	8110-03AB	A	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	5.299423
	199 Polyline	8110-03AB	A	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	5.22865
	202 Polyline	8110-03AB	A	WSL	WATER SERVICE LINE		<null></null>	WATR-LATL			<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	5.17658
	158 Polyline	8110-03AB	N	VMAIN	WATER MAIN	8" PVC W	<null></null>	WATR-MAIN	8	INCH	PVC	<null></null>	<null></null>	<null></null>	<null></null>	205.094344
	159 Polyline	8110-03AB	N	SSMAIN	SEWER MAIN	8" HDPE SS	REPLACE (E) 8" VCP SS W/8" SS (PIPE BURST)	SSWR-MAIN	8	INCH	HDPE	<null></null>	<null></null>	<null></null>	<null></null>	239.87383
	160 Polyline	8110-03AB	N	SSMAIN	SEWER MAIN	8" HDPE SS	<null></null>	SSWR-MAIN	8	INCH	HDPE	<null></null>	<null></null>	<null></null>	<null></null>	260.342292
	161 Polyline	8110-03AB	N	VMAIN	VVATER MAIN	8" PVC W	<null></null>	VVATR-MAIN	8	INCH	PVC	<null></null>	<null></null>	<null></null>	<null></null>	99.791497
	162 Polyline	8110-03AB	N	VMAIN	VVATER MAIN	8" PVC W	<null></null>	WATR-MAIN	8	INCH	PVC	<null></null>	<null></null>	<null></null>	<null></null>	206.268992
	163 Polyline	8110-03AB	N	FHSL	FIRE HYDRANT SERVICE LINE	<null></null>	<null></null>	FIRE-HYDT-LATL	<null></null>	14.996367						
	167 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	27.281439
	168 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	16.087449
	170 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1" W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	15.618026
	172 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	27.511274
	173 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	27.218478
	174 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1" W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	15.218999
	176 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	15.274142
1	178 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	27.087469
1	179 Polyline	8110-03AB	N	VMAIN	VVATER MAIN	8" PVC W	«Null»	WATR-MAIN	8	INCH	PVC	<null></null>	<null></null>	<null></null>	<null></null>	61.69825
1	180 Polyline	8110-03AB	N	VMAIN	VVATER MAIN	8" PVC W	<null></null>	WATR-MAIN	8	INCH	PVC	<null></null>	<null></null>	<null></null>	<null></null>	40.407189
	181 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	11.043611
1	183 Polyline	8110-03AB	N	SSMAIN	SEWER MAIN	8" HDPE SS	<null></null>	SSWR-MAIN	8	INCH	HDPE	<null></null>	<null></null>	<null></null>	<null></null>	90.171586
	184 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	23.417953
1	185 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	14.742678
	187 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	27.12640
	189 Polyline	8110-03AB	N	FHSL	FIRE HYDRANT SERVICE LINE	FH & GV	<null></null>	FIRE-HYDT-LATL	<null></null>	16.23217						
	190 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	14.60319
	192 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	27.04621
	193 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	36.26091
	194 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	25.47406
	195 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	25.5653
	196 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	37.11138
	197 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	26.5980
	198 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	14.74090
	200 Polyline	8110-03AB	N	SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	26.88774
		8110-03AB		WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	14.67847
		8110-03AB		SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	25.19595
	204 Polyline	8110-03AB	N	WSL	WATER SERVICE LINE	1" VV	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	37.01510
	205 Polyline	8110-03AB		WSL	WATER SERVICE LINE	1"W	<null></null>	WATR-LATL	1	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	37.08254
1		8110-03AB		SSLAT	SEWER LATERAL	4" LAT	<null></null>	SSWR-LATL	4	INCH	<null></null>	<null></null>	<null></null>	<null></null>	<null></null>	25.372169
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